

DYTISCIDAE:

II. Faunistic notes on *Lacconectus* MOTSCHULSKY from China and neighbouring countries, and descriptions of new species

(Coleoptera)

M. BRANCUCCI

Abstract

The species of *Lacconectus* MOTSCHULSKY, 1855 (Coleoptera: Dytiscidae) from China and neighbouring countries are reviewed. 15 species are recognized, eight of which are described as new: *Lacconectus nigrita* sp.n. (Laos), *L. kubani* sp.n. (Laos, China), *L. menglunensis* sp.n. (China), *L. meyeri* sp.n. (Laos, China), *L. maoyangensis* sp.n. (China), *L. schillhammeri* sp.n. (Laos), *L. pseudosimilis* sp.n. (Laos) and *L. pseudonicolasi* sp.n. (Laos, China). In addition, the extensive material now available provides additional information on the distribution of several species: *L. punctatus* BRANCUCCI and *L. basalis* SHARP are recorded for the first time from Laos, *L. similis* BRANCUCCI and *L. tonkinoides* BRANCUCCI are recorded for the first time from China.

Key words: Coleoptera, Dytiscidae, *Lacconectus*, China, Laos, new species, distribution.

Introduction

Since my revision of *Lacconectus* (BRANCUCCI 1986) and the description of *L. hainanensis* HENDRICH (HENDRICH 1998), a rather large number of specimens has been collected in China and Laos. Study of this material has revealed 15 species occurring in this area. Eight species are described as new, four from Laos, two from China, and two from both countries.

Including the newly-described species from Indonesia (BRANCUCCI 2002), *Lacconectus* now number 53 species distributed all through the Oriental Region. The distribution of the species can be summarized as follows (number of species in parantheses):

Indian subcontinent (5); Myanmar (6); Continental Southeast Asia (5); Malaysia and Indonesia (14); China (incl. Taiwan) and Laos (11); Philippines (1); widespread species (1: *L. basalis* SHARP).

Acronyms & CWBS localities:

CASS Chinese Academy of Sciences, Institute of Applied Ecology, Shenyang

CWBS China Water Beetle Survey

NMB Naturhistorisches Museum Basel

NMW Naturhistorisches Museum Wien

CWBS loc. 193: **Hainan Province**; Qiongzong County; Wuzhi Shan [= Five Finger Mountain] Resort, ca. 2 km from Wuzhi Shan Village, ca. 30 km E Maoyang Town; small stream, ca. 2 - 3 m wide, shaded, flowing through degraded primary forest, below Wuzhi Shan Resort, ca. 600 m a.s.l.; 17./18.I.1996; leg. M.A. Jäch, L. Ji & M. Wang (see JÄCH & JI 1998: Fig. 3).

- CWBS loc. 194: **Hainan Province**; Qiongzong County; stream, ca. 5 m wide, densely shaded, flowing partly through deep gorge, through primary forest, above Wuzhi Shan Resort; ca. 700 - 800 m a.s.l.; 18.I.1996; leg. M.A. Jäch, L. Ji & M. Wang.
- CWBS loc. 208: **Hainan Province**; Ledong County; Jianfeng Mountains; ca. 5 km E Tian Chi Village; two small streams, ca. 3 m wide, flowing through degraded primary forest and shrubs, ca. 800 m a.s.l.; 23.I.1996; leg. M.A. Jäch, L. Ji & M. Wang.
- CWBS loc. 354: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, Menglun Town, near Mangmo Village, road Menglun - Ganlanba, ca. 15 km W Menglun, ca. 700 - 800 m a.s.l.; stream, ca. 1 - 2 m wide, flowing through degraded primary forest; 5.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 357: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, Menglun Town, Green Stone Forest Park, ca. 3 km S Menglun, ca. 500 m a.s.l.; pond (size: ca. 10 x 20 m) and small effluent (ca. 0.5 m wide and disappearing in ponor after ca. 20 m), shaded, surrounded by primary forest; 6.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 359: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, Menglun Town, ca. 10 km NW Menglun, along road Menglun - Mengyang, ca. 700 m a.s.l.; Wushiwu He [River Fiftyfive], ca. 3 - 5 m wide, flowing through primary forest in steep valley; 7.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 360: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, Menglun Town, ca. 700 - 800 m a.s.l.; stream (tributary of CWBS loc. 359), ca. 1 - 2 m wide, flowing through dense primary forest, ca. 10 km NW Menglun; 7.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 364: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, along Mengla - Mengyüan road, ca. 6 km NW Mengla, ca. 700 m a.s.l.; small river (tributary of River Mengla), ca. 5 m wide, flowing through primary forest (partly degraded) and a few villages; 8.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 368: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, near summit of pass between Mengla and Mengyüan, ca. 20 km NW Mengla, ca. 1000 m a.s.l.; small stream, ca. 1 m wide, flowing in steep ravine through Dragon Forest (dense primary forest); 9.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 369: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, ca. 50 km NW Mengla, ca. 800 m a.s.l.; River Nangong, ca. 5 - 8 m wide, flowing through dense forest; 9.XI.1999; leg. M.A. Jäch & H. Schönmann.
- CWBS loc. 371: **Yünnan Province**, Xishuangbanna Dai Autonomous Prefecture, Mengla County, near Yanuo Village, on pass (Mt. Jinuo), ca. 35 km NW Menglun, ca. 1100 m a.s.l.; small stream, ca. 1 m wide, flowing along road (Menglun - Mengyang) and through primary forest; 10.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 390: **Yünnan Province**, Simao Prefecture, River Caiyang Nature Reserve, 35 km S Simao, ca. 1100 m a.s.l.; river, ca. 5 - 7 m wide, flowing through primary forest, sandstone cobbles; 16.XI.1999; leg. H. Schönmann & M. Wang.
- CWBS loc. 393: **Yünnan Province**, Simao Prefecture, 25 km SW Simao, road Simao - Lancang, Zhu Shan, ca. 1000 m a.s.l.; forest stream (right tributary of River Zhu Shan), 1 - 2 m wide, residual pools and plant debris, substrate: rock steps, coarse and fine sandstone gravel; 17.XI.1999; leg. H. Schönmann & M. Wang.
- CWBS loc. 449: **Guangdong Province**, Zhaoqing Prefecture, Zhaoqing County, Dinghu Nature Reserve, core area, above Qingyun Temple, ca. 250 m a.s.l.; stream, ca. 1.5 - 2 m wide, through dense primary forest, geology: sandstone; 28.X.2001; leg. M.A. Jäch & A. Komarek.

- CWBS loc. 455: **Guangdong Province**, Zhaoqing Prefecture, Fengkai County, ca. 50 km E of Fengkai, ca. 5 km W of Qixing, Yulao – Mocun road, Heishiding [Black Stone Mountain Top] Nature Reserve, below Heishiding Nature Reserve head office, ca. 150 m a.s.l., 23°27'36"N 111°54'36"E; River Qixing [Seven Stars], ca. 10 – 15 m wide, through deep valley with more or less natural forest, incl. hygroscopic rock at shore and mouth of small left tributary; 31.X. + 2.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 456: **Guangdong Province**, Zhaoqing Prefecture, Fengkai County, ca. 50 km E of Fengkai, ca. 5 km W of Qixing, Yulao – Mocun road, Heishiding [Black Stone Mountain Top] Nature Reserve, ca. 300 – 400 m a.s.l., 23°27'04"N 111°53'53"E; several streams, ca. 1 – 2 m wide, through dense primary forest; 1.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 449: **Guangdong Province**, Zhaoqing Prefecture, Zhaoqing County, Dinghu Nature Reserve, core area, above Qingyun Temple, ca. 250 m a.s.l.; stream, ca. 1.5 – 2 m wide, through dense primary forest, geology: sandstone; 28.X.2001; leg. M.A. Jäch & A. Komarek (see JÄCH & JI 2003: Fig. 20).
- CWBS loc. 454: **Guangdong Province**, Zhaoqing Prefecture, Zhaoqing County, southwestern part of Dinghu Nature Reserve, ca. 50 – 150 m a.s.l.; stream Xigou [West Valley], ca. 3 – 5 m wide, through gorge with dense primary forest with tourist path, incl. hygroscopic rock near waterfall, geology: sandstone; 30.X.2001; leg. M.A. Jäch & A. Komarek (see JÄCH & JI 2003: Figs. 17, 21).
- CWBS loc. 455: **Guangdong Province**, Zhaoqing Prefecture, Fengkai County, ca. 50 km E of Fengkai, ca. 5 km W of Qixing, Yulao – Mocun road, Heishiding [Black Stone Mountain Top] Nature Reserve, below Heishiding Nature Reserve head office, ca. 150 m a.s.l., 23°27'36"N 111°54'36"E; River Qixing [Seven Stars], ca. 10 – 15 m wide, through deep valley with more or less natural forest, incl. hygroscopic rock at shore and mouth of small left tributary; 31.X. + 2.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 456: **Guangdong Province**, Zhaoqing Prefecture, Fengkai County, ca. 50 km E of Fengkai, ca. 5 km W of Qixing, Yulao – Mocun road, Heishiding [Black Stone Mountain Top] Nature Reserve, ca. 300 – 400 m a.s.l., 23°27'04"N 111°53'53"E; several streams, ca. 1 – 2 m wide, through dense primary forest; 1.XI.2001; leg. M.A. Jäch & A. Komarek.

Taxonomy

Lacconectus nigrita sp.n.

TYPE LOCALITY: Oudom Xai Village, Oudomxai Province, N Laos.

TYPE MATERIAL: **Holotype** ♂ (NMB): "LAOS-N (Oudomxai), 1.-9.v.2002 ~ 1100 m 20°45'N 102°09'E, OUDOMXAI (17 km NEE [= ENE]), Vit. Kubáň leg.". **Paratype** ♂ (NMB): Laos, Louangphrabang Province, 5 km W Bang Song Cha, 20°33'-4'N, 102°14'E, 1200 m a.s.l., 24-30.IV.1999, leg. V. Kubáň.

DIAGNOSIS: 5.9 - 6.0 mm long, 3.5 mm wide. Body oval, matt, black with testaceous markings on head, lateral margins of pronotum and apex of elytra.

Head black with transverse ferruginous marking on frons and V-shaped marking on clypeus, semi-matt. Microsculpture consisting of small polygonal, almost rounded meshes with numerous deep punctures. Clypeal grooves, one row of deep punctures alongside eyes and one transverse depression beside eyes well marked. Antennae testaceous; joints slender, fifth 1.8 times as long as broad.

Pronotum black, lateral margins ferruginous, narrowly posteriorly and more broadly anteriorly, semi-matt. Microsculpture consisting of deeply impressed polygonal meshes and of dense well-impressed striae. Longitudinal median suture long and deeply impressed. Anterior and lateral rows coarse; punctures medium-sized, somewhat coalescing at margins. Lateral margins distinctly bordered, furrow interrupted shortly before reaching anterior border.

Elytra black, with only a preapical testaceous spot, matt. Epipleura completely black. Microsculpture consisting of deeply impressed polygonal meshes, becoming superficial and more transverse posteriorly, and of large, dense and deeply impressed striae covering the whole surface. Row of punctures hardly visible within the striae. Sutural row of punctures incomplete, consisting of a few large punctures in apical part. Discal and sublateral rows broadly interrupted before base; in a straight line on basal third. Interspaces with some sparse punctures in apical half.

Underside dark brown, legs, prosternal process, posterior part of metacoxal process and sternites ferruginous-brown. Prosternal process short, 1.5 times as long as broad, strongly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by deep and short striae at mid-length. Sternites 3, 4 and 5 each with sparse and irregularly distributed, medium-sized punctures particularly in middle. Anal sternite microstriolate posteriorly with an oblique row of coarse and coalescent punctures on both sides of middle. Posterior margin distinctly bordered and broadly rounded.

Aedeagus, in lateral view, strongly curved and twisted (Fig. 11); in dorsal view, broad and broadly rounded at apex. Right paramere broad (Fig. 12).

Female similar to ♂. Valvae long and cylindrical. Seta short and subapical.

ETYMOLOGY: Black species.

DIFFERENTIAL DIAGNOSIS: This species comes very near to *Lacconectus strigulifer* ZIMMERMANN. It can be easily distinguished by its larger size and by the aedeagus, which is flattened dorsoventrally.

DISTRIBUTION: N Laos (Oudomxai).

Lacconectus hainanensis HENDRICH

Lacconectus hainanensis HENDRICH 1998: 102.

This species was described from Hainan. The females have cylindrical valvae; the seta is subapical.

Lacconectus punctatus BRANCUCCI

Lacconectus punctatus BRANCUCCI 1986: 144.

Material examined:

LAOS: Kham Mouan Province, Ban Khoun Ngeun, 18°07'N, 104°29'E, ~ 200 m a.s.l., 19.-31.V.2001, leg. P. Pacholátko (21 exs., NMB). Kham Mouan Province, Ban Khoun Ngeun, 18°07'N, 104°29'E, 250 m a.s.l., XI.2000, leg. E. Jendek & P. Pacholátko (14 exs., NMW, NMB). Viangchan Province, Phou Khao Khouay NP, Nam Leuk, Tad Leuk waterfall, 200 m a.s.l., 1.-8.VI.1996, flight intercept trap, leg. H. Schillhammer (3 exs., NMW, NMB).

This species was described from Cambodia, Vietnam, and has been recorded from Thailand. It seems to be widespread. The localities cited above are the first records for Laos.

DISTRIBUTION: Cambodia, Vietnam, Thailand and Central Laos.

Lacconectus kubani sp.n.

TYPE LOCALITY: Ban Song Cha, Louangphrabang Province, Laos.

TYPE MATERIAL: **Holotype** ♂ (NMB): "LAOS, 24-30.iv.1999, Louangphrabang pr., 20°33-4'N 102°14'E, Ban Song Cha (5km W), 1200 m, Vit. Kubán leg.". **Paratypes**: 33 exs. (10 ♂♂, 23 ♀♀, NMB): same date as holotype;

25 exs. (6 ♂♂, 19 ♀♀, NMB): Laos, Louangphrabang Province, 5 km W Ban Song Cha, 20°33'-4'N 102°14'E, 1200 m a.s.l., 1.-9.V.1999, leg. V. Kubáň; 7 exs. (3 ♂♂, 4 ♀♀, NMB): Laos, Louangphrabang Province, 5 km W Ban Song Cha, 20°33'-4'N 102°14'E, 1200 m a.s.l., 1.-16.V.1999, leg. V. Kubáň; 31 exs (9 ♂♂, 22 ♀♀, NMB): Laos, Louangphrabang Province, 5 km W Ban Song Cha, 20°33'N 102°14'E, 1200 m a.s.l., 10.-16.V.1999, leg. V. Kubáň; 65 exs. (13 ♂♂, 52 ♀♀, NMB): Laos, Oudomxai Province, 17 km ENE Oudom Xai, 20°45'N, 102°09'E, ~ 1100 m a.s.l., 1.-9.V.2002, leg. V. Kubáň; 10 exs. (1 ♂, 7 ♀♀, NMW; 1 ♂, 1 ♀, NMB): CWBS loc. 360; 2 exs. (1 ♂, 1 ♀, NMW): CWBS loc. 364; 1 ♂ (NMW): CWBS loc. 368; 1 ♀ (NMW): CWBS loc. 369; 3 exs. (2 ♂♂, NMW; 1 ♂, NMB): CWBS loc. 371; 10 exs. (4 ♂♂, 3 ♀♀, NMW; 2 ♂♂, 1 ♀, NMB): CWBS loc. 390; 2 ♀♀ (NMW): CWBS loc. 393.

DIAGNOSIS: 4.3 - 5.0 mm long, 2.4 - 3.0 mm wide. Body broadly oval, shining, dark brown with testaceous markings on head, pronotum and elytra.

Head ferruginous-brown, broadly dark brown along eyes, semi-matt. Microsculpture consisting of small polygonal meshes with numerous deep punctures. Clypeal grooves, a row of deep punctures alongside eyes and a transverse depression beside eyes very well marked. Antennae testaceous; joints slender, fifth 1.8 times as long as broad.

Pronotum dark ferruginous-brown, darker on disc, semi-matt. Microsculpture consisting of small, polygonal and well-impressed meshes and of numerous deeply impressed punctures all over the surface. Longitudinal median suture short and deeply impressed. Anterior and lateral rows coarse; punctures large, deeply impressed and coalescing particularly at margins. Lateral margins distinctly bordered, furrow interrupted before reaching anterior border.

Elytra shining, dark brown, with a basal band, a preapical and an apical spot testaceous. Lateral margins and epipleura brownish black. Microreticulation absent; ground smooth. Punctuation consisting of numerous small, deeply impressed punctures, often elongate, particularly at margins (Figs 1-4) Sutural row of punctures very incomplete, consisting of a few large punctures in apical part. Discal and sublateral rows broadly interrupted before base; punctures large and irregularly distributed in apical third, close together and in a straight line anteriorly. Interspaces with some sparse punctures in apical half.

Underside dark brown, prosternal and metacoxal processes and sternites testaceous. Prosternal process short, 1.5 times as long as broad, strongly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by deep and short striae at their mid-length. Sternites 3, 4 and 5 each with sparse and irregularly distributed, medium-sized punctures, particularly in middle. Anal sternite microstriolate with an oblique row of coarse and coalescent punctures on both sides of middle. Posterior margin finely bordered and broadly rounded.

Aedeagus, in lateral view, evenly curved, almost constant in width, somewhat tapered towards apex and rounded at apex (Fig. 13); in dorsal view, also evenly tapered and pointed at apex. Right paramere broad (Fig. 14).

Female similar to ♂. Valvae long and very narrow, narrowly rounded at apex. Seta short and lateral.

ETYMOLOGY: This species is dedicated to my friend and collector of part of the type-series, Vítězslav Kubáň.

DIFFERENTIAL DIAGNOSIS: This species can be distinguished from all other known species by the microsculpture, which is absent from the entire surface, and by the numerous, mostly elongate, deeply impressed, small punctures covering the elytra entirely. The punctures are much denser and smaller than those described for *L. punctipennis* BRANCUCCI for example.

DISTRIBUTION: Laos (Louangphrabang) and China (Yunnan).

Lacconectus menglunensis sp.n.

TYPE LOCALITY: CWBS loc. 354.

TYPE MATERIAL: **Holotype** ♂ (CASS): "CHINA: Yunnan, Xishuangbanna ca. 15km W Menglun 5.11.1999, ca. 700 - 800 m leg. Jäch, et al. (CWBS 354)". **Paratype** ♂ (NMW): same data as holotype.

DIAGNOSIS: 5.0 - 5.3 mm long, 3.0 - 3.1 mm wide. Body broadly oval, semi-matt, testaceous-brown.

Head ferruginous-brown, semi-matt. Surface sculpture consisting of small polygonal well-impressed meshes and of minute punctures. Clypeal grooves, a row of deep punctures alongside eyes and a short transverse depression beside eyes distinct but not deeply impressed. Antennae testaceous; joints slender, fifth 1.8 times as long as broad.

Pronotum testaceous-brown, very slightly darker on disc, semi-matt. Microsculpture consisting of small, rounded and well-impressed meshes and of minute but distinctly visible punctures. Longitudinal median suture long and very superficially impressed. Anterior and lateral rows consisting of numerous medium-sized punctures, mostly not coalescing. Lateral margins distinctly bordered, furrow broadly interrupted before anterior border.

Elytra semi-matt, testaceous-brown, uniform in colour even at margins; wings seen by transparency giving the elytra darker markings in places. Epipleura ferruginous. Reticulation consisting of small polygonal meshes covering the whole surface, from base to apex. Punctuation consisting of numerous well-impressed punctures distributed over entire surface. Sutural row of punctures incomplete, consisting of large and well-spaced punctures, particularly in apical part. Discal and sublateral rows interrupted before base; punctures medium-sized, sparse and irregularly distributed in apical third, in a straight line on anterior half. Interspaces, particularly second, with very sparse punctures.

Underside ferruginous-brown. Prosternal process short, 1.3 times as long as broad, very strongly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by a deep and short stria at mid-length. Sternites 3, 4 and 5 each with a few sparse and irregularly distributed, medium-sized punctures particularly in middle. Anal sternite distinctly reticulate; meshes polygonal. Posterior margin distinctly bordered and broadly rounded.

Aedeagus, in lateral view, evenly curved, almost constant in width, abruptly broadened before apex and narrowly rounded at apex (Fig. 15); in dorsal view, broadened in apical half and pointed at apex. Right paramere broad (Fig. 16).

Female not known.

ETYMOLOGY: This species was collected near Menglun.

DIFFERENTIAL DIAGNOSIS: Though the habitus of this species is reminiscent of *L. basalis*, it can be easily distinguished by the smaller size and the uniform coloration. The microreticulation, which is distinct clearly from base to apex, the punctuation of the elytra and the characteristic aedeagus in lateral view enable easy recognition.

DISTRIBUTION: China (Yunnan).

Lacconectus basalis SHARP

Lacconectus basalis SHARP 1882: 598. - BRANCUCCI 1986: 130.

Material examined:

MYANMAR: Sagaing Division, Chatthin Wildlife Sanctuary, 200 m a.s.l., 5.-17.X.1998, leg. Schillhammer (1 ex., NMW). Shan State, road Kalaw - Thazi, km 23, 20°42.378'N, 96°30.218'E, 720 m a.s.l., 24.X.1998, leg.

- Schillhammer (1 ex. NMB). Sagaing Division, Alaungdaw Katthapa NP, ca. 1.5 km E of camp, 350 m a.s.l., 17.X.2000, leg. Schillhammer (3 exs., NMW).
- LAOS: Kham Mouan Province, Ban Khoun Ngeun, 18°07'N, 104°29'E, ~ 200 m a.s.l., 19.-31.V.2001, leg. P. Pacholátko (27 exs., NMB). Bolikhamxai Province, Pakkading, 18°20'N, 104°00'E, ~ 300 m a.s.l., 1.-2.VI.2001, leg. P. Pacholátko (9 exs., NMB). Bolikhamxai Province, Pakkading, 18°20'N, 104°00'E, 200 m a.s.l., 24-29.V.2001, leg. V. Kubán (7 exs., NMB). Bolikhamxai Province, Ban Nape (8 km NE), 18°21' N, 105°08' E, ~ 600 m a.s.l., 1.-18.V.2001, leg. V. Kubán (1 ex., NMB). Viangchan Province, Phou Khao Khouay NP, Nam Leuk, Tad Leuk waterfall, 200 m a.s.l., 1.-8.VI.1996, leg. Schillhammer (7 exs., NMW, NMB); same locality, flight intercept trap, leg. Schillhammer (3 exs., NMW, NMB). Oudomxai Province, 17 km ENE of Oudom Xai 20°45'N, 102°09'E, ~ 1100 m a.s.l., 1.-9.V.2002, leg. V. Kubán (3 exs., NMB). Louangphrabang Province, Thong Khan, 19°35'N, 101°58'E, ~ 750 m a.s.l., 11.-21.V.2002, leg. V. Kubán (18 exs., NMB).
- THAILAND: Chiang Mai, leg. Malicky (6 exs., NMW, NMB). Chiang Mai, Zoo, at light, 18°49' N, 98°57' E, 10-17.IV.1989, leg. Chantaramongkol & Malicky (2 exs., NMW). Mae Hong Son, 1000 m a.s.l., 16.-23.VI.1993, leg. Schneider (12 exs., NMW, NMB).
- CHINA: Yunnan: CWBS loc. 354 (1 ex., NMW); CWBS loc. 369 (1 ex., NMB).
- MALAYSIA: W Perak, 25 km NW of Ipoh, Banjaran Titi Wangsa Mountains, Korbu Mountains, 11.-16.I.1999, leg. P. Pacholátko (1 ex., NMB).

A very widespread species. First record for Laos.

Lacconectus tonkinoides BRANCUCCI

Lacconectus tonkinoides BRANCUCCI 1986: 127.

Material examined:

- CHINA: Yunnan: CWBS loc. 364 (3 exs., NMW, NMB); Guangdong: CWBS loc. 449 (46 exs., NMW, NMB); CWBS loc. 454 (22 exs., NMW, NMB); CWBS loc. 455 (2 exs., NMW); CWBS loc. 456 (1 ex., NMB).
- VIETNAM: Thanh Hoa Province, Cuc Phuong, 24.VI.1997, leg. C.-F. Lee (2 exs., NMW).

Lacconectus tonkinoides was described from Hoa Binh in Vietnam (BRANCUCCI 1986). It is a medium-sized species (4.6 - 5.2 mm). The aedeagus is slender and the valvae of the female are cylindrical. This is the first record from China (Yunnan, Guangdong).

DISTRIBUTION: Vietnam (Hoa Binh) and China (Yunnan, Guangdong).

Lacconectus formosanus (KAMIYA)

Platynectus formosanus KAMIYA 1938: 30 – GUÉORGUIEV 1972: 57 – BRANCUCCI 1986: 122 – NILSSON 1995: 359 – NILSSON et al. 1995: 41 – HENDRICH 1998: 104.

Material examined:

- CHINA: Taiwan: Taitung Hsien, Hsinkangshan, above Chenkang, 800 m a.s.l., 17.IV.1998, leg. A. Smetana & L. Robillard (2 exs., NMW); same locality, 21.IV.1998, leg. A. Smetana (1 ex. NMW).

Because of its size, *Lacconectus formosanus* has been confused with *L. tonkinoides*. However, the aedeagi offer a very simple way to distinguish both species. Females can also be easily distinguished as the valvae are long and flattened in *L. formosanus* but cylindrical in *L. tonkinoides*.

Lacconectus meyeri sp.n.

TYPE LOCALITY: Oudom Xai Village, Oudomxai Province, N Laos.

TYPE MATERIAL: **Holotype** ♂ (NMB): "LAOS-N (Oudomxai), 1-9.v.2002, ~ 1100 m, 20°45'N 102°09'E, OUDOM XAI, 17 km NEE [- ENE], Vit. Kubán leg.". **Paratypes**: 56 exs. (19 ♂♂, 37 ♀♀; NMB); same data as holotype; 1 ♂ (NMB); Laos, Louangphrabang Province, 5 km W Ban Song Cha, 20°33'-4'N 102°14'E, 1200 m a.s.l., 1.-16.V.1999, leg. V. Kubán; 1 ♂ (NMB); CWBS loc. 359; 3 ♀♀ (NMW); CWBS loc. 360; 2 exs. (1 ♂, 1 ♀, NMW); CWBS loc. 364; 1 ♂ (NMW); CWBS loc. 368.

DIAGNOSIS: 4.4 - 4.8 mm long, 2.5 - 2.7 mm wide. Body broadly oval, shining, brown with testaceous markings on margins of pronotum, on base, median part and apex of elytra.

Head ferrugineous-brown, broadly dark brown alongside eyes, semi-matt. Microsculpture consisting of small polygonal meshes with numerous and deep punctures. Clypeal grooves and a transverse depression beside eyes short, row of deep punctures alongside eyes very well marked. Antennae testaceous; joints broad, fifth 1.4 times as long as broad.

Pronotum brown, lateral part broadly testaceous, semi-matt. Microsculpture consisting of small, polygonal, almost rounded, and minute and well-impressed sparse punctures. Longitudinal median suture long and superficially impressed. Anterior and lateral rows as well as punctures at middle of each laterobasal quarter consisting of numerous medium-sized punctures, partly coalescent. Lateral margins finely bordered, furrow broadly interrupted before anterior border.

Elytra shining, brown, narrowly dark brown along base, with a subbasal band, a postmedian lateral and a subapical spot testaceous. Lateral margins brownish black. Epipleura testaceous basally, brownish black on remaining surface. Reticulation superficial, consisting of small rounded meshes, becoming progressively more elongate and superficial posteriorly; in apical part replaced by a fine striolation. Punctuation consisting of minute punctures at the intersection of the meshes. Sutural row of punctures with a few medium-sized punctures in apical half. Discal and sublateral rows broadly interrupted before base; punctures medium-sized, sparse, even in anterior half, irregularly distributed in apical third. Second interspace with a few large punctures along middle.

Underside dark brown, prosternal process, posterior part of metacoxal processes and apical part of anal sternite as well as legs testaceous. Prosternal process short, 1.2 times as long as broad, distinctly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by several large punctures at mid-length. Sternites 3, 4 and 5 each with a few sparse small punctures. Anal sternite microreticulate; meshes elongate anteriorly and polygonal posteriorly, with an oblique row of coarse and coalescent punctures on both sides of middle. Posterior margin distinctly bordered and broadly rounded.

Aedeagus, in lateral view, strongly curved at middle, gently broadened in apical part (Fig. 17); in dorsal view, evenly tapered and pointed at apex. Right paramere broad (Fig. 18).

Female similar to ♂. Valvae long and very narrow, narrowly rounded at apex. Seta short and subapical.

ETYMOLOGY: This species is dedicated to Dr. Christian A. Meyer, Director of the Natural History Museum of Basel, with thanks for his support.

DIFFERENTIAL DIAGNOSIS: The characteristic aedeagus and the small rounded and superficial meshes covering the anterior two-thirds of elytra enable this species to be easily identified. The aedeagus is somewhat similar to that of *L. similis* BRANCUCCI, but the latter has a convex border before the apex. *Lacconnectus similis* also has more deeply impressed meshes at the base of the elytra which rapidly turn into a fine striolation that disappears before the mid-length. The form of the aedeagus is also very reminiscent of that of *L. heinertzi* BRANCUCCI, described from Thailand, but these two species are not at all related. The latter species is much larger and very broad, and the elytra are brownish black with distinct testaceous bands.

DISTRIBUTION: China (Yünnan) and Laos (Louangphrabang).

Lacconectus maoyangensis sp.n.

TYPE LOCALITY: CWBS loc. 194.

TYPE MATERIAL: **Holotype** ♂ (CASS): "CHINA: Hainan (194) 30km E Maoyang, 18.1. Wuzhi Shan Resort 1996 700-800m, leg. Jäch". **Paratypes**: 2 ♀♀ (NMW): same data as holotype; 1 ♀ (NMW): CWBS loc. 193; 1 ♂ (NMB): CWBS loc. 208.

DIAGNOSIS: 5.0 - 5.5 mm long, 2.8 - 3.0 mm wide. Body oval, shining, brown with testaceous markings along base, in subapical and apical parts.

Head ferrugineous-brown, narrowly darker alongside eyes, somewhat shining. Surface sculpture consisting of small polygonal meshes and of minute punctures. Clypeal grooves, a row of deep punctures alongside eyes and a short transverse depression beside eyes well marked. Antennae testaceous; joints slender, fifth 1.8 times as long as broad.

Pronotum dark brown, largely ferrugineous at margins, semi-matt. Microsculpture consisting of small, polygonal and well-impressed meshes and of minute, deeply impressed and numerous punctures, particularly numerous on disc. Longitudinal median suture short and deeply impressed. Anterior and lateral rows consisting of medium-sized punctures. Punctures at middle of each laterobasal quarter partly coalescent. Lateral margins distinctly bordered, furrow broadly interrupted before anterior border.

Elytra shining, brown to dark brown; base, a subapical and an apical spot lighter. Lateral margins of elytra brownish black. Epipleura testaceous at base, brownish black on rest of surface. Reticulation superficial, even at base, consisting of small rounded meshes at base, then modified into a fine striolation. Elytra with a weakly shagreened lustre posteriorly. Punctuation superficial, consisting of minute punctures over entire surface. Sutural row of punctures very incomplete, consisting of large and well-spaced punctures, particularly in apical part. Discal and sublateral rows broadly interrupted before base; punctures large and irregularly distributed in apical third, close together and in a straight line anteriorly. Interspaces, particularly second, with very sparse punctures.

Underside ferrugineous-brown. Prosternal process short, 1.3 times as long as broad, very strongly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by a deep and short stria at their mid-length. Sternites 3, 4 and 5 each with sparse and irregularly distributed, medium-sized punctures, particularly in middle. Anal sternite microstriolate with a group of coalescent punctures on both sides of middle. Posterior margin distinctly bordered and broadly rounded.

Aedeagus, in lateral view, evenly curved, almost constant in width and rapidly tapered towards apex and narrowly rounded at apex (Fig. 19); in dorsal view, also evenly tapered and pointed at apex. Right paramere slender (Fig. 20).

Female similar to ♂. Valvae long and very narrow, narrowly rounded at apex. Seta short and subapical.

ETYMOLOGY: Named in reference to the type locality.

DIFFERENTIAL DIAGNOSIS: This species is very close to *L. pseudosimilis* but can be easily distinguished by the elytral reticulation, which disappears after the basal third, and by the minute punctures of the elytra, which are smaller and not so numerous. Furthermore, the aedeagus is evenly tapered at apex and the paramere is much more slender.

DISTRIBUTION: China (Hainan).

Lacconectus schillhammeri sp.n.

TYPE LOCALITY: Phou Khao Khouay N.P., Viangchan Province, Central Laos.

TYPE MATERIAL: **Holotype** ♂ (NMW): "C-LAOS: Prov. Viangchan, Phou Khao Khouay NP Nam Leuk env. Tad Leuk Waterf. \ 1. - 8.6.1996, 200m flight intercept trap leg. Schillhammer (15c)". **Paratypes**: 9 exs. (6 ♀ ♀, NMW; 2 ♂ ♂, 1 ♀, NMB); same data as holotype.

DIAGNOSIS: 4.2 - 4.6 mm long, 2.4 - 2.7 mm wide. Body broadly oval, shining, testaceous to ferrugineous-brown, with dark brown markings on base of pronotum and elytra.

Head ferrugineous-brown, broadly darker along eyes, semi-matt. Microsculpture consisting of small polygonal and well-impressed meshes and of distinctly visible and numerous minute punctures. Clypeal grooves, a row of punctures alongside eyes and a transverse depression beside eyes well marked. Antennae testaceous; joints somewhat broad, fifth 1.7 times as long as broad.

Pronotum testaceous, darker on disc, semi-matt. Microsculpture consisting of small, polygonal and well-impressed meshes and of well-impressed minute punctures all over the surface. Longitudinal median suture short and superficially impressed. Anterior and lateral rows with medium-sized punctures and partly coalescent. Punctures at middle of each laterobasal quarter medium-sized. Lateral margins distinctly bordered, furrow interrupted before reaching anterior border.

Elytra shining, brown, with a basal band, a preapical and an apical spot testaceous. Extreme base of elytra brownish black. Lateral margins and posterior part of epipleura brownish black, anterior part testaceous. Reticulation consisting of small polygonal meshes at base, rapidly replaced by fine striolation and disappearing before middle. Punctuation of minute punctures spread over the entire surface. Sutural row of punctures very incomplete, consisting of a few medium-sized punctures in apical part. Discal and sublateral rows broadly interrupted before base; punctures medium-sized and sparse, even at base, isolated in apical third. Second interspace with some sparse punctures.

Underside brown. Prosternal process short, 1.3 times as long as broad, distinctly strongly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by superficial, short striae at mid-length. Sternites 3, 4 and 5 each with few sparse medium-sized punctures, particularly in middle. Anal sternite microstriolate, reticulate on posterior part and with an oblique row of coalescent punctures on both sides of middle. Posterior margin finely bordered and broadly rounded.

Aedeagus, in lateral view, evenly curved, tapered in apical part and ending in a very narrowly rounded apex (Fig. 21); in dorsal view, also evenly tapered and pointed at apex. Right paramere slender (Fig. 22).

Female similar to ♂. Valvae long and very narrow, narrowly rounded at apex. Seta short and subapical.

ETYMOLOGY: Dedicated to Harald Schillhammer (NMW), who collected this beautiful species.

DIFFERENTIAL DIAGNOSIS: This species is closely related to *L. tonkinoides*; aedeagus very similar, but apex more broadly rounded in *L. tonkinoides*. *Lacconectus tonkinoides* can be easily distinguished by its size (4.6 - 5.6 mm long) and by the reticulation, which is modified into a striolation behind the middle; in *L. schillhammeri* the latter disappears before the middle. The valvae of the female are cylindrical and the seta is apical in *L. tonkinoides*; it is narrow and the seta subapical in *L. schillhammeri*.

DISTRIBUTION: Central Laos.

Lacconectus similis BRANCUCCI

Lacconectus similis BRANCUCCI 1986: 109.

Material examined:

LAOS: Kham Mouan Province, Ban Khoun Ngeun, 18°07'N, 104°29'E, ~ 200 m a.s.l., 19.-31.V.2001, leg. P. Pacholátko (49 exs., NMB); same locality, 24.-29.IV.2001, leg. V. Kubán (7 exs.). Louangphrabang Province, Thong Khan, 19°35'N, 101°58'E, 11.-21.V.2002, ~ 750 m a.s.l., leg. V. Kubán (6 exs., NMB).

CHINA: Yunnan: CWBS loc. 354 (6 exs., NMW, NMB). CWBS loc. 357 (2 exs., NMW, NMB). CWBS loc. 359 (2 exs., NMW, NMB). CWBS loc. 360 (15 exs., NMW, NMB). CWBS loc. 364 (2 exs., NMW). CWBS loc. 369 (1 ex., NMW).

Lacconectus similis was described from Louangphrabang, which belongs to Laos and not to Thailand as stated by BRANCUCCI (1986). One new locality can be added here. This species is very closely related to *L. basalis* and hardly can be distinguished without examining the aedeagus. Females are very difficult to separate. As stated by BRANCUCCI (1986), the elytral reticulation is somewhat more impressed in *L. basalis*. Furthermore, specimens belonging to the latter species can be sorted from a long series because on average they are larger than *L. similis*. Finally, both species seem to occur in the same habitats in Laos.

Lacconectus similis is recorded here for the first time from China (Yunnan).

Lacconectus pseudosimilis sp.n.

TYPE LOCALITY: Ban Khoun Ngeun, Kham Mouan Province, Central Laos.

TYPE MATERIAL: **Holotype** ♂ (NMB): "LAOS-C,KHAM MOUAN pr. Ban Khoun Ngeun; ~ 200 m: 18°07'N 104°29'E; Pacholátko leg.; 19.-31.v.2001". **Paratypes**: 60 exs. (15 ♂♂, 34 ♀♀, NMB; 1 ♂, NMW): same data as holotype; 10 exs. (3 ♂♂, 6 ♀♀, NMB; 1 ♀, NMW): Laos, Khammouan Province, Ban Khoun Ngeun, 18°07'N, 104°29'E, ~ 200 m a.s.l., 24.-29.IV.2001, leg. V. Kubán; 54 exs. (25 ♂♂, 25 ♀♀, NMW; 2 ♂♂, 2 ♀♀, NMB): Khammouan Province, XI.2000, Ban Khoun Ngeun, 18°07'N, 104°29'E, ~ 250 m a.s.l., leg. E. Jendek & P. Pacholátko; 1 ♂ (NMB): Bolikhamxai Province, 17 km ENE Ban Nape, 18°21'N, 105°08'E, ~ 600 m a.s.l., 1.-18.V.2001, leg. V. Kubán.

DIAGNOSIS: 4.9 - 5.3 mm long, 2.8 - 3.1 mm wide. Body oval, shining, brown with testaceous markings along base, in subapical and apical parts.

Head ferruginous-brown, darker alongside eyes, matt. Surface sculpture consisting of small polygonal and very well-impressed meshes and of numerous minute punctures. Clypeal grooves, a row of deep punctures alongside eyes and a transverse depression beside eyes well marked. Antennae testaceous; joints slender, fifth 1.8 times as long as broad.

Pronotum brown, margins testaceous, semi-matt. Microsculpture consisting of very small, polygonal, almost rounded and very well-impressed meshes and of minute punctures, the latter particularly numerous on disc. Longitudinal median suture short and deeply impressed. Anterior and lateral rows consisting of medium-sized punctures. Punctures at middle of each laterobasal quarter large and partly coalescent. Lateral margins distinctly bordered, furrow narrowly interrupted before reaching anterior border.

Elytra shining brown; base, a subapical and an apical spot lighter. Lateral margins brownish black; black markings reaching posterior border of pronotum. Epipleura ferruginous at base, dark brown on rest of surface. Elytra with a weakly shagreened lustre. Reticulation small and superficial, consisting of elongate meshes in the form of a fine striolation even at the base (Fig. 7), disappearing posterior of middle. Punctuation consisting of minute but distinctly impressed punctures, separated by distinct petal-like meshes on basal third. Sutural row of punctures very incomplete, consisting of a few large punctures in apical part. Discal and sublateral rows broadly interrupted before base; punctures medium-sized, in a straight line on anterior half, sparse and irregularly distributed in apical third. Sublateral row ending anteriorly with a group of five or six

punctures. Interspaces with a few medium-sized sparse punctures; larger punctures in apical half very sparse.

Underside ferrugineous-brown. Prosternal process short, 1.7 times as long as broad, distinctly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by deep and short striae at mid-length. Sternites 3, 4 and 5 each with a few sparse medium-sized punctures. Anal sternite finely striolate, with a short row of punctures on both sides of middle. Posterior margin distinctly bordered and broadly rounded.

Aedeagus, in lateral view, evenly curved, almost constant in width, abruptly tapered before apex and very broadly rounded at apex (Fig. 23); in dorsal view, also evenly tapered and pointed at apex. Right paramere broad (Fig. 24).

Female similar to ♂. Valvae long and narrow, very narrowly rounded at apex. Seta short and subapical.

DIFFERENTIAL DIAGNOSIS: This species is closely related to *L. similis*, but can easily be distinguished by the reticulation and the punctation which is distinctly more impressed on the basal half of the elytra. The aedeagus is evenly curved and tapered, and not broadened in apical two-thirds as in *L. similis*. It is also very close to *L. basalis* and even occurs at the same locality. The only reliable characters to separate these two lie in the very different aedeagus. *Lacconectus basalis* is usually larger, more rounded laterally and more convex dorsally. The reticulation also is visible distinctly behind the middle, but the most interesting character enabling the two species to be distinguished easily is the dark brown lateral marking, which is not interrupted before the base in *L. pseudosimilis* but is broadly interrupted in *L. basalis*.

ETYMOLOGY: This species is named in reference to its similarity with *L. similis*.

DISTRIBUTION: Laos.

Lacconectus pseudonicolasi sp.n.

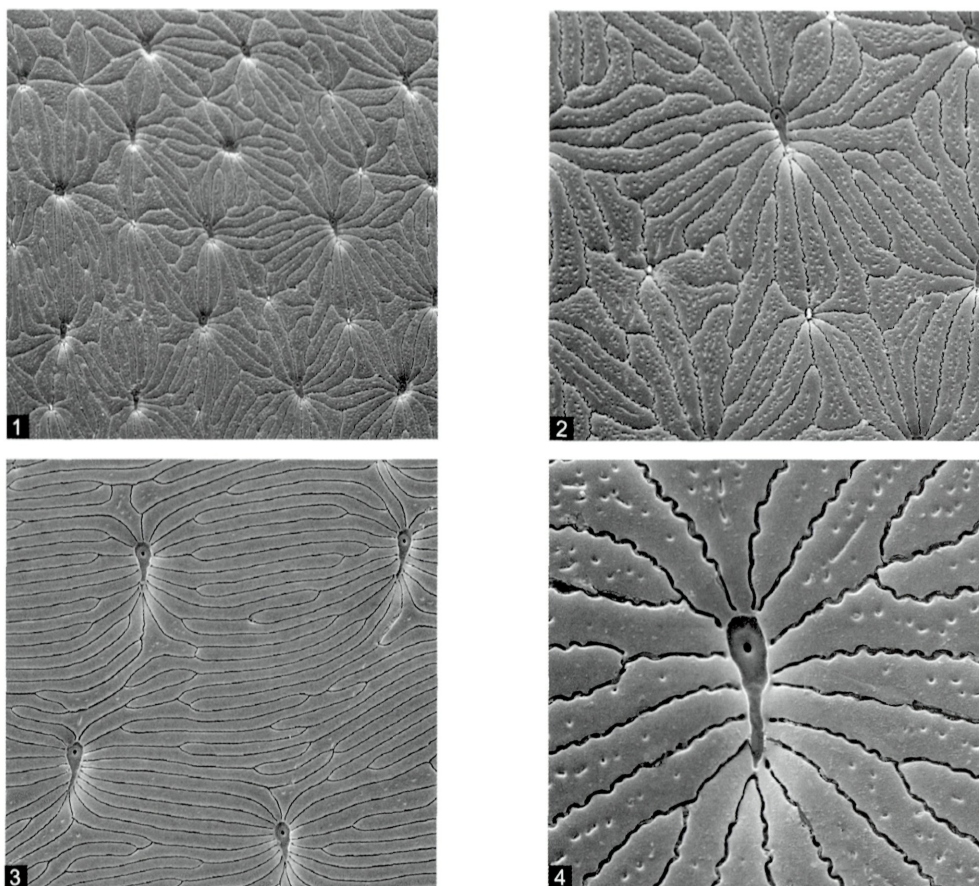
TYPE LOCALITY: Ban Song Cha, Louangphrabang Province, N Laos.

TYPE MATERIAL: **Holotype** ♂ (NMB): "LAOS, 10-16.v.1999, Louangphrabang pr., 20°33'-4'N 102°14'E, Ban Song Cha (5km W), 1200 m, Vit. Kubán leg.". **Paratypes:** 12 exs. (3 ♂♂, 9 ♀♀, NMB): same data as holotype; 67 exs. (14 ♂♂, 53 ♀♀, NMB): Oudomxai Province, 17 km ENE Oudom Xai, 20°45'N, 102°09'E, ~ 1100 m a.s.l., 1-9.V.2002, leg. V. Kubán; 20 exs. (7 ♂♂, 8 ♀♀, NMW; 4 ♂♂, 1 ♀, NMB): CWBS loc. 354; 9 exs. (3 ♂♂, 5 ♀♀, NMW; 1 ♂, NMB): CWBS loc. 360; 11 exs. (5 ♂♂, 3 ♀♀, NMW; 3 ♂♂, NMB): CWBS loc. 368; 1 ex. ♂♂ (NMW): CWBS loc. 393.

DIAGNOSIS: 4.5 - 4.9 mm long, 2.5 - 2.8 mm wide. Body oval, semi-matt, brown with testaceous markings along base, on subapical and in apical parts.

Head ferrugineous-brown, darker alongside eyes, semi-matt. Surface sculpture consisting of small polygonal and well-impressed meshes and of minute punctures. Clypeal grooves, a row of deep punctures alongside eyes and a transverse depression beside eyes well marked. Antennae testaceous; joints slender, fifth 1.8 times as long as broad.

Pronotum ferrugineous-brown, somewhat darker on anterior border and on disc, semi-matt. Microsculpture consisting of small, polygonal and well-impressed meshes and of minute punctures. Longitudinal median suture short and deeply impressed. Anterior and lateral rows consisting of medium-sized punctures. Punctures at middle of each basolateral quarter large and partly coalescent. Lateral margins finely bordered, furrow narrowly interrupted before reaching anterior border.



Figs. 1 - 4: Elytral reticulation, at basal 0.25 of: 1) *Lacconectus kubani* (600x); 2) same (1200x); 3) same (1600x); 4) same (3600x).

Elytra shining, brown; base, a subapical and an apical spot lighter. Lateral margin narrowly brownish black. Epipleura ferrugineous at base, dark brown on rest of surface. Elytra with a weakly shagreened lustre. Reticulation superficial, consisting of a fine striolation even at base, disappearing from about middle. Punctuation consisting of minute punctures separated by hardly visible petal-like meshes (Fig. 9). Sutural row of punctures very incomplete, consisting of a few large punctures in apical part. Discal and sublateral rows broadly interrupted before base; punctures medium-sized and sparse, irregularly distributed in apical third. Interspaces with some sparse punctures in apical half, in second, punctures present as far as base.

Underside dark brown, prosternal and metacoxal processes and last sternite brown-ferrugineous. Prosternal process short, 1.3 times as long as broad, strongly bordered at margins and broadly rounded at apex. Metacoxal lines represented only by deep and short striae at mid-length. Sternites 3, 4 and 5 each with a few sparse medium-sized punctures. Anal sternite microreticulate with a short row of punctures on both sides of middle. Posterior margin distinctly bordered and broadly rounded.

Aedeagus, in lateral view, evenly curved, almost constant in width, straight in apical fifth and broadly rounded at apex (Fig. 25); in dorsal view, also evenly tapered and pointed at apex. Right paramere broad (Fig. 26).

Female similar to ♂. Valvae long and very narrow, narrowly rounded at apex. Seta short and subapical.

DIFFERENTIAL DIAGNOSIS: This species is closely related to *L. formosanus*, but can be easily distinguished by the elytral reticulation, which is much less impressed at base, and also by the aedeagus which is broadly rounded at the apex and not slender.

ETYMOLOGY: Though the two species are not closely related phylogenetically and actually are very distinct, the aedeagi of *L. nicolasi* BRANCUCCI and *L. pseudonicolasi* are very similar in shape.

DISTRIBUTION: Laos (Louangphrabang) and China (Yunnan).

Lacconectus peguensis BRANCUCCI

Lacconectus peguensis BRANCUCCI 1986: 111.

Material examined:

M Y A N M A R: Shan State, road Kalaw – Thazi, 20°42.378'N, 96°30.218'E, 720 m a.s.l., 24.X.1998, leg. Schillhammer (77 exs., NMW, NMB).

This species has been described based on two specimens (♂ + ♀) from Pegu and another ♂ labelled "Bengale" (BRANCUCCI 1986). The numerous specimens treated here represent the first long series. The specimens are 4.6 - 5.1 mm long, and 2.6 - 2.9 mm wide.

DISTRIBUTION: Myanmar.

Key to *Lacconectus* species of China and Laos

The reticulation at the extreme base of the elytra is well-developed in most species and is of no help in identification. When "reticulation at base of elytra" is used in the following key, the reticulation found just below the base is meant, around the first punctures of the discal row of punctures.

- 1 Upper surface ferrugineous-brown with black markings, never with striae 2
- Entire upper surface black, covered with dense and deep striae. Aedeagus (Fig. 11). Laos...
..... *nigrita*
- 2 Elytra with larger punctures, particularly in 2nd interspace; punctures as large as those in rows
of punctures..... 3
- Elytra without larger punctures or with isolated punctures in interspaces 4
- 3 Large punctures very numerous in 2nd interspace, particularly in basal half. Ground-surface
with a deeply impressed reticulation. Aedeagus narrowly rounded at apex. ♀: Valvae
cylindrical. China (Hainan)..... *hainanensis*
- Large punctures in 2nd interspace very sparse. Ground-surface obsolescent-microstriolate.
Aedeagus truncated at apex. ♀: Valvae flat, very narrow. SE Asia *punctatus*
- 4 Elytra without medium-sized punctures covering the whole surface. Ground-surface at least
microstriolate 5
- Elytra with dense medium-sized punctures; size about 1/4 as large as those in rows. Ground-
surface completely smooth. Broad, oval species, distinctly convex. Aedeagus (Fig. 13). Laos,
China *kubani*
- 5 Elytra reticulate or microstriolate at base, always smooth or very lightly striolate at apex..... 6

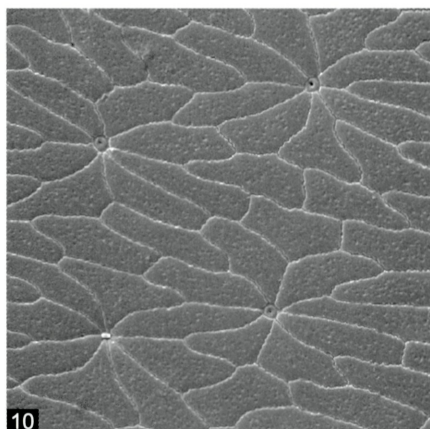
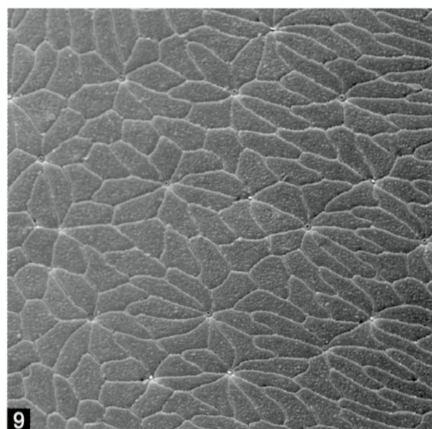
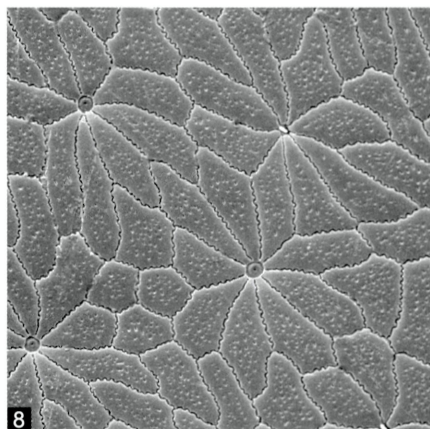
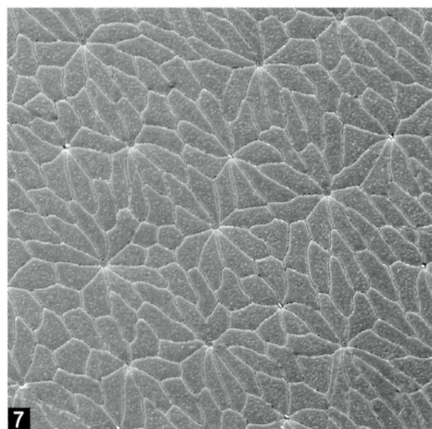
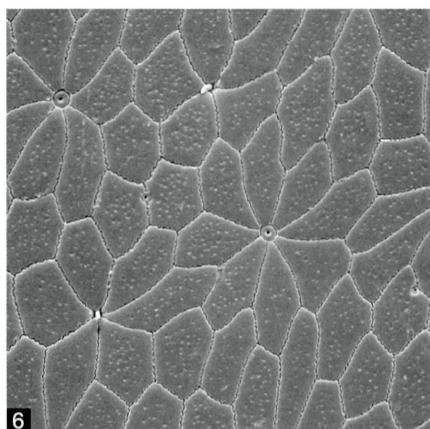
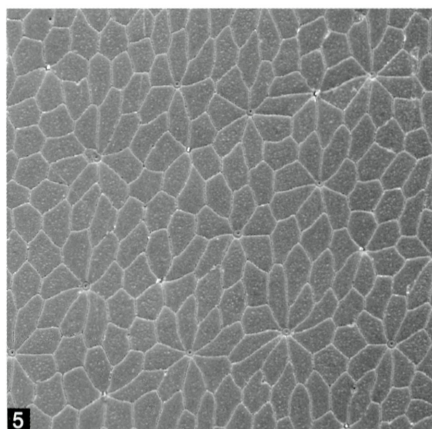
- Elytra strongly reticulate from base to apex; meshes always polygonal. Aedeagus (Fig. 15).
China (Yunnan)..... *menglunensis*
- 6 Smaller species (4.2 - 5.5 mm). Base of elytra very superficially reticulate or just striolate..... 7
- Larger, broadly oval species (5.1 - 5.8 mm). Base of elytra distinctly reticulate. Aedeagus
slender. Widespread species *basalis*
- 7 Base of elytra superficially reticulate, meshes polygonal, visible in at least entire anterior third 8
- Base of elytra very slightly reticulate, more striolate; meshes elongated and not distinct behind
anterior 1/5 10
- 8 Reticulation and punctation slightly impressed, small punctures very small. Apical 1/4 of
elytra striolate. Aedeagus (Fig. 17) distinctly rounded or truncated at apex (Fig. 17)..... 9
- Reticulation and punctation more impressed. Apical 1/4 of elytra indistinctly striolate.
Aedeagus very narrowly rounded at apex. ♀: Valvae cylindrical. Vietnam, China *tonkinoides*
- 9 Larger species (5.0 - 5.5 mm). Aedeagus narrowly rounded at apex. Taiwan, S China
..... *formosanus*
- Smaller species (4.0 - 4.8 mm). Aedeagus truncated at apex (Fig. 17). Laos, China *meyeri*
- 10 Smaller species (4.2 - 5.3 mm), broadly oval, upper side ferruginous-brown 11
- Larger species (5.0 - 5.5 mm), oval-elongate with distinct black markings on testaceous
background. Aedeagus (Fig. 19). China *maoyangensis*
- 11 Larger species (4.5 - 5.3 mm). Aedeagus, in lateral view, broad and broadly rounded at apex 12
- Smaller species (4.2 - 4.6 mm). Aedeagus, in lateral view, slender and very narrowly rounded
at apex (Fig. 21). Laos. *schillhammeri*
- 12 Pronotum distinctly dark brown on disc. Aedeagus, in lateral view, evenly rounded, not
distinctly broadened in apical half (Fig. 23) 13
- Pronotum testaceous, at most somewhat darkened on disc. Aedeagus, in lateral view,
distinctly broadened in apical half. Laos. *similis*
- 13 Extreme base of elytra microstriolate only; small punctures distinct even at lower
magnification. Aedeagus (Fig. 23). Laos..... *pseudosimilis*
- Extreme base of elytra microreticulate; small punctures hardly visible at lower magnification.
Aedeagus (Fig. 25). Laos, China..... *pseudonicolasi*

Notes on sex ratio

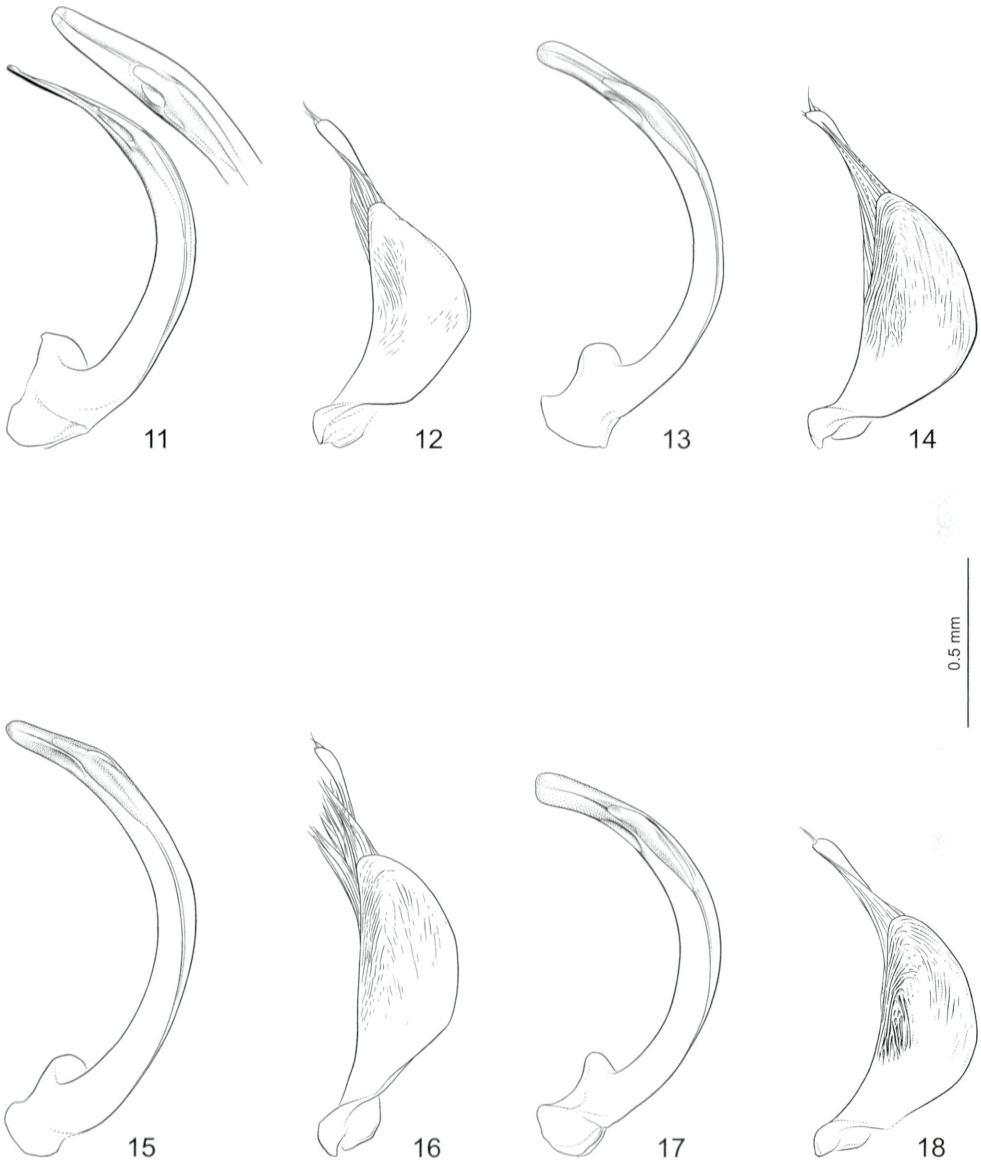
In different species collected in Laos at the beginning of May in different years, there is a much larger proportion of females than males. For instance, the sex ratio is 1:2 in *Lacconectus meyeri*, based on a total of 57 specimens; it is 1:3 in *L. kubani*, based on 171 specimens; and even 1:3.6 in *L. pseudonicolasi*, based on 79 specimens. These proportions seem to change later in the year. No specimens were collected later in the year from Laos, but smaller numbers of the same species were collected in November in China.

Conclusions

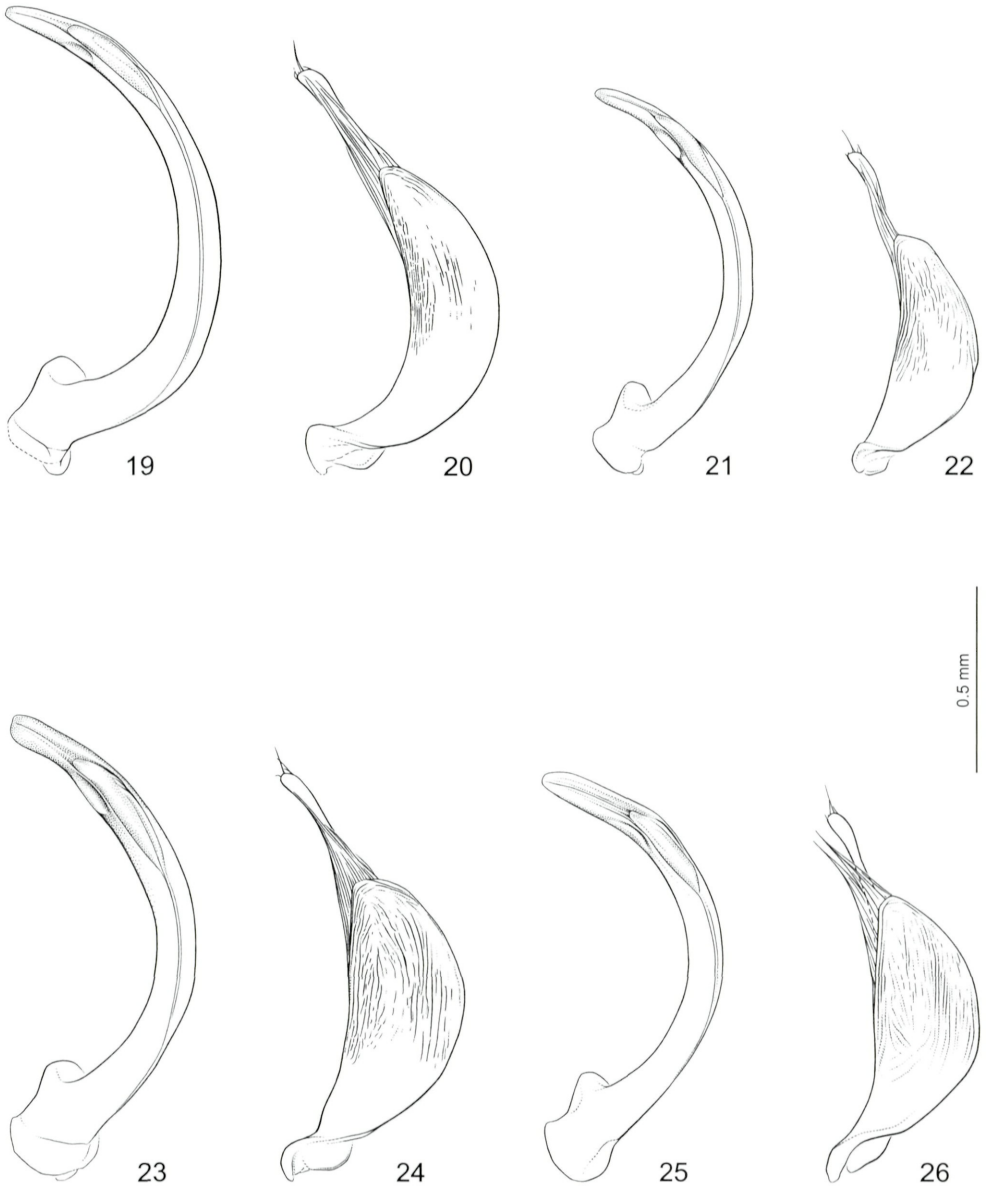
The study of extensive new material has resulted in the addition of ten species to the known fauna of China and neighbouring countries, from which only four species previously were known: *L. basalis* (widespread species), *L. formosanus* (China), *L. hainanensis* (China) and *L. similis* (Laos). Eight species are described as new to science. A few additional specimens also were found to represent new species, but they are not described here as they are represented only by females. The present contribution brings the number of species known from this area to 14, but several more species are to be expected.



Figs. 5 - 10: Elytral reticulation, at basal 0.25 of: 5) *Lacconectus similis* (600x); 6) same (1200x); 7) *L. pseudosimilis* (600x); 8) same (1200x); 9) *L. pseudonicolasi* (600x); 10) same (1200x).



Figs. 11 - 18: 11) *Lacconectus nigrita*, aedeagus in lateral view; 12) same, right paramere; 13) *L. kubani*, aedeagus in lateral view; 14) same, right paramere; 15) *Lacconectus menglunensis*, aedeagus in lateral view; 16) same, right paramere; 17) *L. meyeri*, aedeagus in lateral view; 18) same, right paramere.



Figs. 19 - 26: 19) *Lacconectus maoyangensis*, aedeagus in lateral view; 20) same, right paramere; 21) *L. schillhammeri*, aedeagus in lateral view; 22) same, right paramere; 23) *Lacconectus pseudosimilis*, aedeagus in lateral view; 24) same, right paramere; 25) *L. pseudonicolasi*, aedeagus in lateral view; 26) same, right paramere.

Acknowledgements

I would like to thank Dr. Manfred A. Jäch (Vienna) for the loan of interesting material collected in China, Laos, and Myanmar. My thanks go also to Adrian Pont (Oxford) for correcting the English of this manuscript and Mr. M. Düttgelin, Centre for Microscopy of the University of Basel, for the SEM-photographs. The illustrations for this paper were made by Armin Coray, and I thank him for his excellent work.

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Michel BRANCUCCI

Entomology Department, Natural History Museum, Augustinergasse 2, CH - 4001 Basel, Switzerland
(michel.Brancucci@bs.ch)

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Jahr/Year: 2003

Band/Volume: [3](#)

Autor(en)/Author(s): Brancucci Michel

Artikel/Article: [Dytiscidae: II. Faunistic notes on *Lacconectus* Motschulsky from China and neighbouring countries, and descriptions of new species \(Coleoptera\) 95-113](#)